

What is claimed is:

1. An abdominal exercise apparatus comprising:
 - a base having an inflatable back wedge section; and
 - a flexible seat disposed on said base, said flexible seat having raised sides that form a shallow cavity therebetween, said cavity adapted to support the upper and lower body parts of a user therein; and
 - said inflatable back wedge section for adjusting an angle of said body parts relative to a horizontal direction.
2. An abdominal exercise apparatus according to claim 1, wherein:
 - said seat includes an upper portion and a lower portion.
3. An abdominal exercise apparatus according to claim 1, wherein:
 - said base further includes an inflatable front wedge section, wherein said back wedge section and said front wedge section are independently inflatable.
4. An abdominal exercise apparatus according to claim 2, wherein:
 - said seat comprises an outer support structure having a hinge coupling said upper portion to said lower portion.

5. An abdominal exercise apparatus according to claim 1, wherein:

said seat further comprises at least one inflatable cushion that provides a floor below said shallow cavity.

6. An abdominal exercise apparatus according to claim 5, wherein:

said at least one inflatable cushion is profiled to accept the body contour of the user.

7. An abdominal exercise apparatus according to claim 5, wherein:

said at least one inflatable cushion comprises a first inflatable cushion that supports a lumbar section of the user.

8. An abdominal exercise apparatus according to claim 7, wherein:

said at least one inflatable cushion further comprises a second inflatable cushion that supports the upper legs of the user.

9. An abdominal exercise apparatus according to claim 8, wherein:

said first and second inflatable cushions are independently inflatable.

10. An abdominal exercise apparatus according to claim 8, wherein:

said seat comprises a front wedge section, and said second inflatable cushion is part of said front wedge section of said seat.

11. An abdominal exercise apparatus according to claim 7, wherein:
said seat further comprises a third inflatable cushion that supports the upper back, neck and head of the user.
12. An abdominal exercise apparatus according to claim 11, wherein:
said first, second and third inflatable cushions are independently inflatable.
13. An abdominal exercise apparatus according to claim 2, further comprising:
a first set of hand grips affixed to opposite sides of said upper portion of said seat.
14. An abdominal exercise apparatus according to claim 13, further comprising:
a second set of hand grips affixed to opposite sides of said lower portion of said seat.
15. An abdominal exercise apparatus according to claim 1, further comprising:
a pair of straps that removably attach said back wedge section to a part of said seat.
16. An abdominal exercise apparatus according to claim 15, wherein:
said straps comprise hook and loop fasteners.
17. A method of exercising comprising:
providing the abdominal exercise apparatus of claim 1;

adjusting an inflation level of said back wedge section to vary a range of motion of the user's body up to at least 30 degrees.

18. A method according to claim 17, wherein:

said inflation level of said back wedge section is adjustable to vary a starting inclination angle of the user's body up to at least 30 degrees.

19. A method according to claim 17, further comprising:

performing at least one exercise with the abdominal exercise apparatus.

20. A method according to claim 17, further comprising:

performing a variety of exercises with the abdominal exercise apparatus

21. A method according to claim 20, wherein:

said variety of exercises are selected from the group comprising

- i) conventional situps;
- ii) twisting situps;
- iii) elevated sitbacks;
- iv) side leg lifts; and
- v) oblique muscle exercises.

22. A kit comprising:

the abdominal exercise apparatus of claim 1; and

an air-pump for inflating air chambers of said abdominal exercise apparatus.

23. A kit according to claim 22, further comprising:

a patch kit for patching said air chambers.

24. An abdominal exercise apparatus comprising:

a base; and

a seat having an upper surface with a profile that is substantially C-shaped, said seat having an upper portion and a lower portion with a pair of hand gripping mechanisms affixed to said upper portion;

wherein at least one of said base and said seat has an inflatable air chamber disposed therein.

25. An abdominal exercise apparatus according to claim 24, wherein:

said seat is removably attached to said base and is disposed on said base during use.

26. An abdominal exercise apparatus according to claim 24, wherein:

said seat has raised sides that form a shallow cavity therebetween, said cavity adapted to support the upper and lower body parts of a user therein.

27. An abdominal exercise apparatus according to claim 24, wherein:

said base comprises an inflatable back wedge section for adjusting an angle of body parts relative to a horizontal direction.

28. An abdominal exercise apparatus according to claim 24, wherein:

said seat comprises a hinge coupling said upper portion to said lower portion.

29. An abdominal exercise apparatus according to claim 24, further comprising:

a pair of hand gripping mechanisms affixed to said lower portion of said seat.

30. An abdominal exercise apparatus according to claim 24, wherein:

said seat comprises an inflatable air chamber for supporting the lumbar section of the user.

31. An abdominal exercise apparatus comprising:

a base; and

a seat attached to said base and having an upper surface that supports body parts of a user, said seat having an upper portion that is coupled to a lower portion by a hinge interface;

wherein at least one of said base and said seat has an inflatable air chamber disposed therein.

32. An abdominal exercise apparatus according to claim 31, wherein:

said seat is removably attached to said base and is disposed on said base during use.

32. An abdominal exercise apparatus according to claim 31, wherein:

said seat has raised sides that form a shallow cavity therebetween, said cavity adapted to support the upper and lower body parts of a user therein.

33. An abdominal exercise apparatus according to claim 31, wherein:

said base comprises an inflatable back wedge section for adjusting an angle of body parts relative to a horizontal direction.

34. An abdominal exercise apparatus according to claim 31, further comprising:


a first pair of hand gripping mechanisms affixed to said upper portion of said seat.

35. An abdominal exercise apparatus according to claim 31, further comprising:

a second pair of hand gripping mechanisms affixed to said lower portion of said seat.

36. An abdominal exercise apparatus according to claim 31, wherein:

said seat comprises an inflatable air chamber for supporting the lumbar section of the user.

37. An abdominal exercise apparatus comprising: 
a plurality of inflatable air chambers disposed in a resilient support structure,
wherein at least one of said inflatable air chambers is adapted to provide a soft
intermediary between the floor and the lower back of the user, and said resilient support
structure is adapted to provide resistance to abdominal muscles of the user.
38. The abdominal exercise apparatus according to claim 37, wherein:
said plurality of inflatable air chambers comprise at least three inflatable air
chambers.
39. The abdominal exercise apparatus according to claim 38, wherein:
said at least three inflatable air chambers are separately inflatable.
40. The abdominal exercise apparatus according to claim 37, wherein:
an inflation level of at least one of said plurality of inflatable air chambers is
adjustable to accommodate users of different sizes and shapes.
41. The abdominal exercise apparatus according to claim 37, wherein:
an inflation level of at least one of said plurality of inflatable air chambers is
adjustable to accommodate different levels of effort during use.

42. The abdominal exercise apparatus according to claim 37, wherein:

an inflation level of at least one of said plurality of inflatable air chambers is adjustable to accommodate different body inclination angles during use.